



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,351	07/18/2003	Bernard O. Li	H0004337 (1139.1132101)	5032
22913	7590	05/14/2004	EXAMINER	
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY)			GHYKA, ALEXANDER G	
60 EAST SOUTH TEMPLE			ART UNIT	PAPER NUMBER
1000 EAGLE GATE TOWER			2812	
SALT LAKE CITY, UT 84111			DATE MAILED: 05/14/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/623,351

Applicant(s)

LI, BERNARD O.

Examiner

Alexander G. Ghyka

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-9, 11, 12, 14, 16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 10, 13, 15, 17 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

ALEXANDER GHYKA  
PRIMARY EXAMINER

AV 2812

*Alex Ghyka*

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 5-20 have been elected without traverse.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 5-9, 11-12, 14, 16 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Batcheldor (US 5,908,661).**

The present claims generally require preparing a wafer for a fabrication process comprising providing a wafer receiving apparatus for receiving a wafer of a first size, the wafer receiving apparatus including a recessed portion having a depth; placing a wafer of the first size in the recessed portion of the wafer receiving apparatus; applying photoresist on the wafer and spinning the wafer and the wafer receiving apparatus while the wafer is placed in the recessed portion of the wafer receiving apparatus.

Batchelor disclose the application of photoresist on wafers using a spin coating apparatus. See column 4, lines 50-60. As required in present claims 5 and 12, Batchelor disclose placing a wafer of the first size in the recessed portion of the wafer receiving apparatus applying photoresist on the wafer and spinning the wafer and the wafer receiving apparatus while the wafer is placed in the recessed portion of the wafer

Art Unit: 2812

receiving apparatus. See Figures 2A, 2B and column 5, line 55 to column 6, line 10.

As required in Claims 6, 7, 14 and 16, Batchelor discloses that the depth of the recessed portion flattens the photoresist profile and is substantially equal to the

thickness of the wafer. See Figure 2A, 230 and 250 and Figure 4B. As required by

Claims 9, 18 and 19, Batchelor discloses the use of a vacuum force to secure the wafer.

See column 5, lines 50-55. As required by Claim 11, the spinning step distributes the

photoresist on both the wafer and the wafer receiving apparatus. See Figure 3A, 202

and 252. Therefore, Batchelor anticipates the claims at hand.

### ***Allowable Subject Matter***

Claims 10, 13, 15, 17 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The cited prior art does not suggest the expansion of the fluid, the use of wafers of a second size larger than the first size, or the depth of the recessed portion as recited by the afore mentioned claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander G. Ghyka whose telephone number is (571) 272-1669. The examiner can normally be reached on Monday through Thursday during general business hours.

Art Unit: 2812

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John F Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AGG  
May 11, 2004

ALEXANDER GHYKA  
PRIMARY EXAMINER

AU 2812

*Alex Ghyska*